19. The apparatus of claim 18, further comprising:

a second valve means connected between a carrier gas source, a divert gas source and the vaporizer, the second valve means having a first valve input connected to the carrier gas source, a second valve input connected to the divert gas source, and a valve output connected to a vaporizer input.

20. (Amended) The apparatus of claim 19 wherein the controller means is connected to switch the second valve means between the first valve input and the second valve input.

21. (Amended) The apparatus of claim 20, wherein the controller means is connected to correspondingly switch the valve means and the second valve means.

REMARKS

This is intended as a full and complete response to the Office Action dated December 19, 2002, having a shortened statutory period for response set to expire on March 19, 2003. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-21 are pending in the application. Claims 1-11 and 17-21 stand rejected.

Claims 12-16 are withdrawn from consideration. The Examiner states that the Applicants' election with traverse of Group I, Claims 1-11 and 17-21 in Paper No. 6 is acknowledged. Applicants submit that they did not elect Group I in Paper No. 6, as the Office Action dated December 19, 2002 is Paper No. 6. In a telephone conference on December 11, 2002 between Keith Tackett and the current Examiner, Mr. Tackett confirmed that Group I was elected with traverse in a telephone conference on August 20, 2002 with a former Examiner. As Applicants have not yet received a written restriction requirement explaining the grounds for restriction, Applicants respectfully

request notification of the grounds for restriction so that they may respond to the grounds for restriction.

Claims 3, 4, 7-11, and 21 stand rejected under 35 U.S.C. § 112, second paragraph. The Examiner asserts that claims 3, 4, 10, and 11 lack antecedent basis for the "first valve." Applicants have amended claims 4 and 11 to remove "first," and submit that claims 3 and 10 refer to "first valve input" which does not lack antecedent basis. The Examiner further asserts that claims 7-9 lack antecedent basis, and Applicants have amended claims 7-9 to provide antecedent basis for "gas source" and delete "three way valve." The Examiner further asserts that claim 21 lacks antecedent basis for "the first valve means" and Applicants have amended claim 21 to delete "first." Applicants have also amended claim 5 to delete "chamber," claim 10 to specify the "input" valve, and claim 20 to insert "means" after "second valve." Applicants submit that the changes made herein do not introduce new matter and are supported by the specification. Applicants respectfully request withdrawal of the rejection of claims 3, 4, 7-11, and 21, as amended.

Claims 1-11 and 17-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gauthier* (U.S. Patent No. 6,007,330) in view of *King* (U.S. Patent No. 4,263,091). The Examiner states that *Gauthier* teaches an apparatus for delivering process gas from a vaporizer to a processing system, comprising a valve 174 connected between the vaporizer 122 and the processing system, wherein the valve has a valve input 122/174 conduit connected to a vaporizer output and a first valve output 174/130 conduit connected to a processing system input and a second valve output 176 connected to a bypass line, and a second valve 104 connected between a first gas source 106 and a second gas source 140, 150, 166 and a valve output 104/102 conduit connected to a vaporizer.

Applicants submit that 176 in *Gauthier* is an input for valve 174 rather than an outlet connected to a bypass line. *Gauthier* describes flow of a gas or fluid through valve 174 via input 176 and out of valve 174 into injectors such as 180a and 180b (column 6, lines 5). *Gauthier* does not describe or suggest a valve connected between a vaporizer and a processing system, the valve having a valve input connected to a vaporizer output and a first valve output connected to a processing system input and a

second valve output connected to a bypass line, as described in claims 1 and 5. Furthermore, *Gauthier* does not describe a valve means for selectively delivering gas to a processing system input and to a bypass line, as described in claim 17. *Gauthier* describes a valve that delivers gas to a processing system, but does not describe a valve means for selectively delivering gas to a processing system and a bypass line.

The Examiner cites *King* as including three-way electrically controlled valves. The Examiner states that it would have been obvious to replace the three-way valves of *Gauthier* with *King's* electrically controlled three way valves including *King's* valve controller.

Applicants submit that *King* does not provide a valve having a valve input connected to a vaporizer output and a first valve output connected to a processing system input and a second valve output connected to a bypass line. The valves 31-34 of *King* each have an output connected to a processing system input, but do not have a second valve output connected to a bypass line, as described in claims 1 and 5. *King* does not describe a valve means for selectively delivering gas to a processing system and a bypass line, as described in claim 17. As neither *Gauthier* nor *King* describes a valve having both a first valve output connected to a processing system input and a second valve output connected to a bypass line, *Gauthier* and *King*, alone or in combination, do not provide all of the limitations of claims 1, 5, and 17. Applicants respectfully request withdrawal of the rejection of claim 1 and of claims 2-4, which depend thereon. Applicants respectfully request withdrawal of the rejection of claim 5 and of claims 6-11, which depend thereon. Applicants respectfully request withdrawal of the rejection of claim 17 and of claims 18-21, which depend thereon.

Applicants are submitting commonly owned U.S. Patent No. 6,258,735 in an Information Disclosure Statement. U.S. Patent No. 6,258,735 describes a bypass line between a mixing system and a chemical vapor deposition reactor, but does not teach a vaporizer as recited in the pending claims.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the method or apparatus of the present invention. Having addressed all issues set out in the office action, Applicants respectfully submit

that the claims are in condition for allowance and respectfully request that the claims be allowed.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

4. (Amended) The apparatus of claim 3, wherein the controller is connected to correspondingly switch the [first] valve and the second valve.

5. (Amended) An apparatus for processing a substrate, comprising:

a chamber having a gas input;

a vaporizer;

a valve connected between the vaporizer and the chamber, the valve having a valve input connected to a vaporizer output and a first valve output connected to the [chamber] gas input and a second valve output connected to a bypass line; and

a controller for switching the valve between the first valve output and the second valve output.

7. (Amended) The apparatus of claim 5, further comprising:

at least one intermediate valve connected between [the] a gas source and [at least one three-way] the valve.

8. (Amended) The apparatus of claim [5] 7, wherein the gas source comprises a plurality of gas supplies.

9. (Amended) The apparatus of claim 5, further comprising:

at least one input valve connected between [the] a gas source and the [at least one three-way] valve, the input valve having a plurality of inputs selectably connected to a plurality of gas supplies of the gas source and an output connected to the valve input [of the three-way valve].

10. (Amended) The apparatus of claim 9, wherein the controller is connected to switch the [second] input valve between [the] a first valve input of the plurality of inputs and [the] a second valve input of the plurality of inputs.

11. (Amended) The apparatus of claim 10, wherein the controller is connected to correspondingly switch the [first] valve and the [second] input valve.

20. (Amended) The apparatus of claim 19 wherein the controller means is connected to switch the second valve means between the first valve input and the second valve input.

21. (Amended) The apparatus of claim 20, wherein the controller means is connected to correspondingly switch the [first] valve means and the second valve means.